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BEFORE THE FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, D.C. 20554

JUN 1 9 2005

In the Matter of)	Federal Communication Commissi on Bureau / Offic e
ARKANSAS CABLE)	
TELECOMMUNICATIONS)	
ASSOCIATION; COMCAST OF)	
ARKANSAS, INC.; BUFORD)	File No
COMMUNICATIONS I, L.P. d/b/a)	
ALLIANCE COMMUNICATIONS)	
NETWORK; WEHCO VIDEO, INC.; and)	
TCA CABLE PARTNERS d/b/a COX)	
COMMUNICATIONS,)	
)	
Complainants,)	
•)	
v.)	
)	
ENTERGY ARKANSAS, INC.,)	
)	
Respondent.)	
-	_)	

Reply Declaration of Michael T. Harrelson, P.E.

1. My name is Michael T. Harrelson and I have been asked by the Arkansas Cable Telecommunications Association ("ACTA") to reply to a number of issues contained in the Response and supporting materials of Entergy Arkansas, Inc. ("Entergy" or "EAI") submitted in this proceeding. In the following pages I will address matters raised in the main response as well as the individual declarations of certain Entergy employees and contractors,

including those apparently hired for the purpose of offering declarations in this proceeding.

- 2. These declarations, together with characterizations in the Response of what EAI's declarants said, create many inaccurate and misleading impressions. Looking closely at and analyzing what each of these witnesses has said—and not said—is very helpful in understanding this dispute and ultimately crafting a resolution to it.
- 3. The tone and length of Entergy's Response, as well as the content of the supporting declarations shows that this obviously now is a bitter dispute with a serious breakdown in cooperation and effective communication between EAI and ACTA's members. These kinds of disputes occur occasionally, but the vast majority of pole owners and communications companies have figured out systems based on written agreements, good construction standards, the NESC and common-sense practical field solutions to work together. This allows pole owners and attaching parties alike to conduct their business in an efficient, safe and cost-effective manner.
- 4. Based on my 42 years of experience in working in and around joint use for both electric and communications companies, I believe that there are several critical elements to efficient and successful joint use of poles.

 They are:
 - The willingness of pole owners and attaching parties alike to work together.

- Sound engineering and construction standards with reasonable provisions for joint use;
- Fair and efficient rules for administering and paying for joint use;
- A thorough understanding and agreement of the parties to rely on and apply the provisions of the National Electrical Safety Code ("NESC");
- Effective training of electric and communications workers (company employees *and* contractors); and
- The fair and reasonable application of these items to engineering, construction, maintenance, inspection and administration of joint use by all companies.
- 5. After working in Arkansas on these issues for well over a year, and based on my decades of experience, first as a long-time power company employee and a consulting professional engineer to both electric and communications companies, many if not most of these critical elements are missing from this case. In order for normal operations to resume for cable operators in EAI's service area, it will be necessary for these conditions to prevail.
- 6. Entergy's basic position here is that the cable companies have created the overwhelming majority of the pole problems in Arkansas and that this justifies the harsh terms that it has imposed on cable operators. The harshest term of all is that Entergy has refused for years to allow the complainants in this case to expand their systems using Entergy's poles.
- 7. As described in the Complaint and elsewhere, EAI launched a massive inspection program of cable television facilities only, either as a

stand-alone safety audit, or embedded in operators' system upgrade or rebuild processes. In so doing, it has applied strict and harsh interpretations of joint-use contracts, reversing years of field practices, and attempted to collect most of the cost of inspections and the costs of correction of the alleged violations from ACTA members companies Cox, Comcast, Alliance and WEHCO.

- 8. While undertaking this initiative against Arkansas cable operators, Entergy has ignored the deficiencies in the knowledge and training of its own people and the correction of its facilities. This creates serious problems not only designing and implementing an inspection and correction program, but has caused a sharp rift between the parties that makes reasonable resolution of even the most routine joint-use issues the exception and not the rule.
- 9. In addition, and as I describe more fully below, EAI is not treating all communications attachers in the same way. For example, the telephone company, SBC and in some areas, Alltel) is not involved at all in EAI's program. Another cable operator that is not a Complainant in this case, has been allowed to complete a very significant new-build project, far more quickly and on far more favorable terms than Entergy has allowed any other operator to do in years. This disparate treatment, and particularly this new build project with this non-complainant operator on the one hand adds to the tensions between Entergy and Complainants. But at least with respect to

the other cable operator's new-build project – it also shows that EAI is capable of resolving field problems in a reasonable and common-sense manner.

- 10. Despite the bitterness and the rifts, I have personal knowledge of a number of recent situations where the parties have been able to work out accommodations on individual issues on an amicable and reasonable basis.

 But again, this unfortunately is not the norm in the current environment.
- 11. To restore normal operating conditions, a thorough and unflinching understanding of the bases of Entergy's claimed reasons for the inspection and for its position in this litigation is essential. ACTA's Reply refers to these bases as "false premises," a designation which I believe is helpful with which I agree. I will address them in some detail in the following pages. After discussing these issues, I offer several recommendations on how this situation can be improved. These include such important items as establishing (1) effective engineering standards; (2) mutually agreeable terms and conditions, including, possibly a new agreement; and (3) a comprehensive and sustained approach to training, particularly for EAI, which has created some extremely unsafe conditions that, in my opinion, make its hostility toward cable on safety issues ironic and particularly misplaced.

False Premise Number 1: Cable Operators Are Responsible For Massive Electric Outages Across Arkansas And This Alone Justifies Entergy's Cable Inspection and Clean-Up Program.

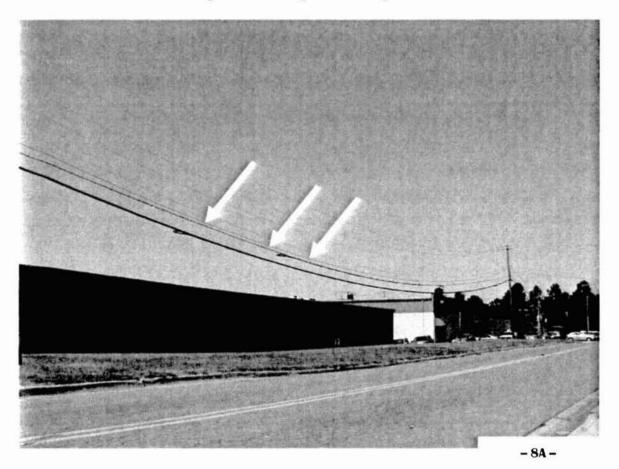
- 12. The factual proof regarding this first false premise is addressed in the declarations of Bennett Hooks, Marc Billingsley, Jeff Gould and Tony Allen on behalf of ACTA. I have reviewed the materials that both EAI and ACTA's declarants have prepared. It is my independent expert opinion that Arkansas cable operators are not responsible for the widespread outages that Entergy alleges.
- outages were not outages at all. The overwhelming majority of those events that actually were outages were neither caused by cable, nor had any cable component whatsoever. Some events were power outages that cable operators simply reported to EAI and that EAI's own reports show were caused by such things as lightning, tornadoes and underground power cables whose locations were incorrectly marked in the field and consequently were cut by underground construction crews. In fact, out of a total of 4102 "reports" only 200 involved electric outages. In one case, the hundreds of pages of so-called outage reports included numerous pages listing not only every single transformer on the entire-distribution circuit, but also every customer on that circuit affected by a "blink" which was allegedly caused by cable workers.

- 14. Equally important, of the outages that Entergy alleged that cable operators caused (although I note that in most cases the Entergy people were careful to use less direct phrases such as "related to" instead of phrases like "caused by") none has been verified actually to have been caused by cable. Entergy has nothing else to validate the allegations. There were some examples in the materials that EAI submitted that may actually have involved a cable television facility but it could not be determined if the cable facility was a "cause" of the outage. One instance was where a mobile home struck a cable. Where a truck pulling one-half of a double-wide trailer hit a cable, no height was given for the load or the cable or if the cable was too low for the location or if the load was too high. In essentially all cases, cable is simply blamed, but there is no support.
- 15. Again, based on my review of the materials and my 42 years of experience in aerial plant engineering and construction, cable operators did not cause massive power outages in Arkansas.

False Premise No. 2: It Is Possible To Resolve Safety And Clearance Issues On Pole Plant By Focusing Exclusively On One Party—Cable Operators.

16. Over the course of my nearly two-year involvement in this matter in Arkansas, one of the items that has concerned me the most is this notion that a cable operator can assume the burden of plant clean-up alone. This is true from both a logistical standpoint as well as a financial one. Cable operators simply cannot undertake all the actions that would be needed to

clean up the pole plant because they cannot themselves perform such tasks as moving high-voltage electric facilities or replacing poles to provide appropriate clearances. With respect to the costs of such work, it is not reasonable to require cable operators to pay for all these clean-up costs if they did not cause them. The photo below provides a good illustration.



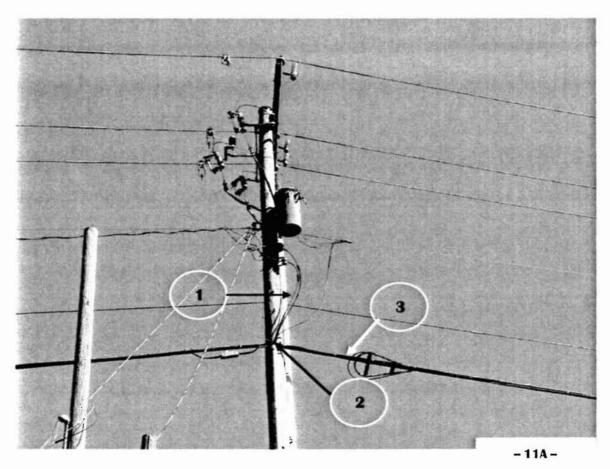
This photo, which I took, shows a very common problem which cannot reasonably be solved without the full cooperation of EAI. Before any other work can be done by any other party, EAI first must correct the impermissibly low sag in its electric lines (Arrows). After that is done, communications cables sags can be adjusted for proper separation from power and proper clearance from ground, if either adjustment is necessary. The proper cable separation for the cable television facilities from power cannot be determined until after power resags. This is an important example of how the pole owner must work with the pole occupants to fix complex safety issues. Location: Little Rock Enmar Dr.

- 17. Equally important, many of the items that Entergy refers to as "violations" are not violations at all, but plant conditions that EAI has found convenient and economically advantageous to call cable television violations.
- 18. Many of the true cable violations can only be corrected by EAI or by telephone. A cable operator can physically correct a violation only if power is high enough for the cable operator to move up to correct a low span or atpole clearance, or if telephone is low enough on the pole to allow the cable operator to move down to correct separations from power on the pole.
- 19. Additionally, if the cable operator is to move down to get more separation from power, the existing pole must be tall enough to allow CATV to keep adequate ground clearance in the spans.
- 20. If this is not the case, the cable TV facilities can only be corrected if either the telephone company (which usually is the lowest facility on the pole) can (or will) move its equipment to a lower spot on the pole of if the power company can (or will) move its equipment to a higher spot.
- 21. But cable operators do not usually own poles, so they must rely exclusively on the pole owners to facilitate the movement of plant if the other parties are unwilling to make the needed moves voluntarily. I am aware of situations where EAI has informed the cable operator that it (the cable operator) must get the telephone company to move its plant. The basic problem with this is that the telephone company and power companies have agreements with one another for the joint use of poles. But there is no

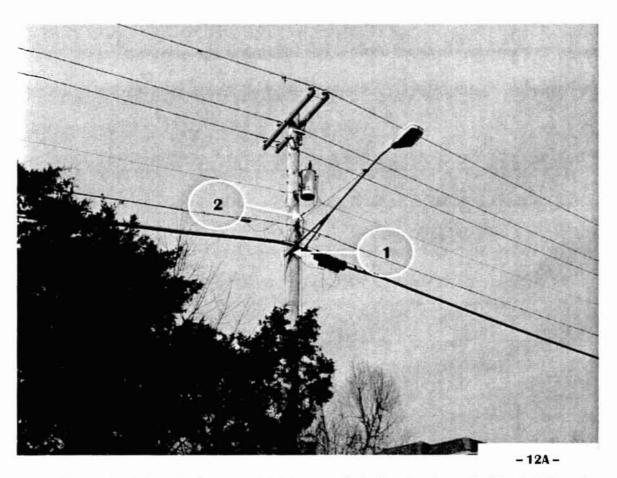
agreement or other relationship that would require telephone to move its facilities at the request of a cable operator—and they frequently decline to do so without such arrangement. In this case, telephone has not cooperated with either company in many cases.

22. Perhaps an even larger problem is that EAI – for whatever reasons – is not quick about relocating its facilities so that the indicated cable corrections can occur. It may be that the power company is reluctant to accept responsibility for its violations, that its crews are too busy or that they simply do not place a priority on completing this make-ready work.

Whatever the case, the result is that EAI has been a major factor for what EAI attempts to blame cable as the unacceptably slow pace of correction. The two photos immediately below provide a vivid example of this.



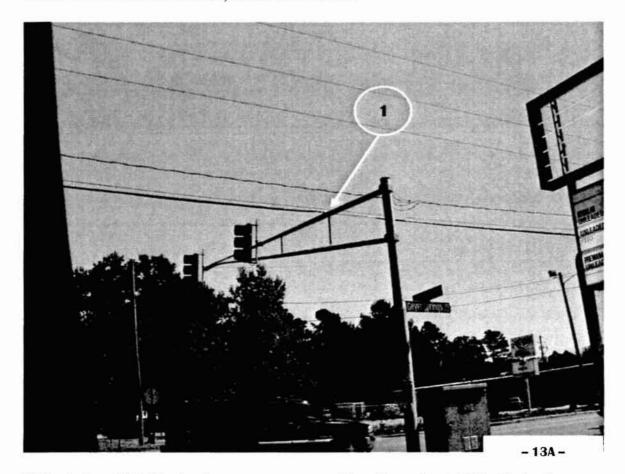
In this photo, which I took, EAI placed an underground service up the pole outside cable (Arrow #1). As a result, the cable operator cannot move or work on this cable without the assistance of power company crews. The Comcast cable is pinned to the pole by electric wires (Arrow #2) which, by code, should be 40" above the cable television line (the bottom black line with the fiber "snow shoe" (Arrow #3)). It is obvious from the position of these facilities that cable was installed first. Despite pleas from Comcast, EAI still has not corrected this clear hazard. Location: Little Rock University Ave.



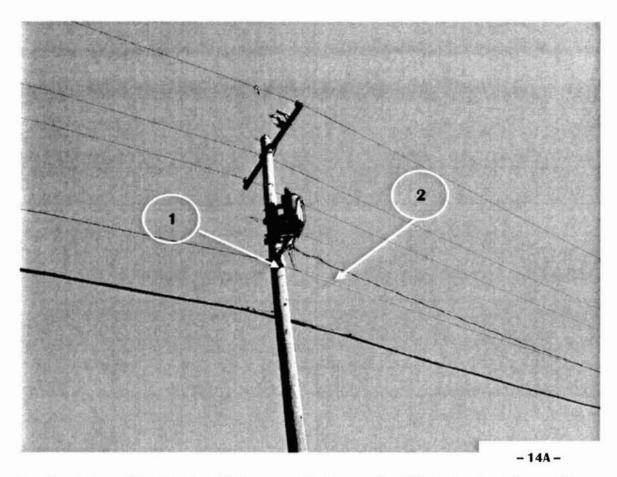
This photo, which I took, shows and EAI street-light bracket installed both below the telephone facilities (Arrow #1) and above the cable television facilities (Arrow #2). It is very obvious that this street light bracket could not have been installed before the cable television and telephone attachments because the street light brackets are installed *on top* of the communications facilities. This is one of what I would estimate to be many thousands of examples in Arkansas that contradict EAI's central assertion that electric facilities always came before cable. Location: Jacksonville, AR, N. First St.

23. Enlisting the cooperation of all parties on the pole is one of the most important issues in this dispute. My concerns with the way in which Entergy and USS designed and executed this inspection should not in any way be interpreted that I am opposed to safety inspections. If done correctly and fairly, they can be valuable to all attaching parties. Much of my work is in this area, and much of that work I do for power companies. The next three photos show that if Entergy had procedures for notice and cooperation in

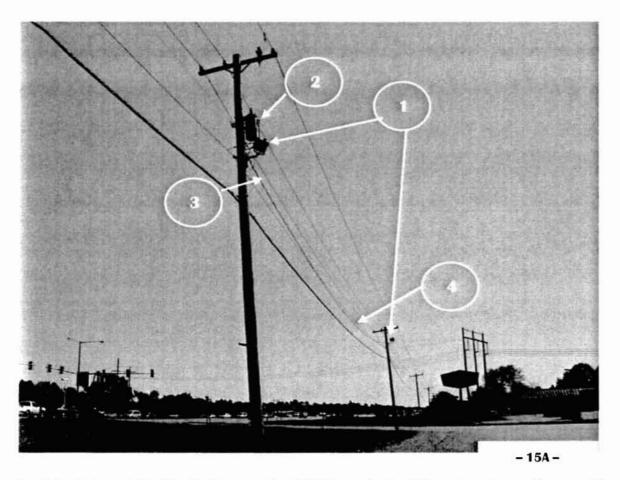
place, as opposed to merely blaming cable operators for serious situations that EAI and others create, could be avoided.



This photo, which I took, shows a common problem throughout Little Rock where new traffic signals are installed on long horizontal arms over the roadway by governmental agencies. In so doing they push the cable and/or telephone facilities up, often creating violations with cable tv, telephone and electric lines (Arrow #1). These types of problems need cooperation and good communications directed and facilitated by the power company. Location: Little Rock Geyer Springs Rd. at Forbing Rd.



In this photo, which I took, EAI has installed a new flood light bracket (Arrow #1) below a fiber-optic cable (Arrow #2) now owned by a competitive telecommunications company as well as triplex secondary to the light on the next pole installed by EAI in violation. As is pointed out elsewhere Entergy installed this fiber optic cable (Arrow #2) in clear violation of the NESC at a time in which it was a part owner of the fiber venture that used to own this fiber strung throughout Little Rock (often in violation). Location: Little Rock University Ave.

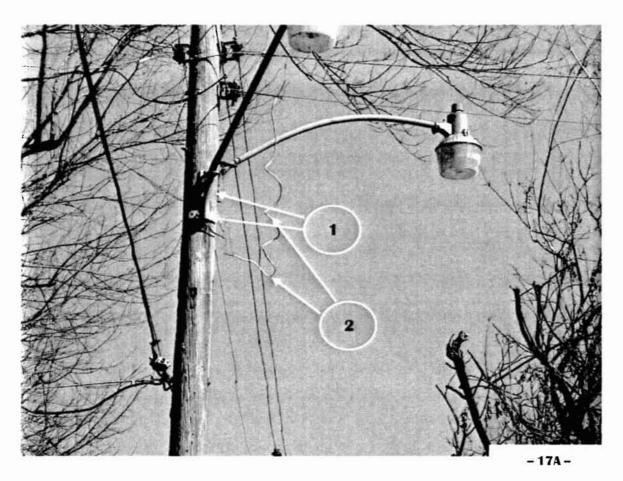


In this photo, which I took, the new flood lights on both of the poles shown (Arrows 1) are the only things served by the transformer (Arrow #2). This indicates that all these facilities were placed long after cable was in place. (I address this issue in greater detail when considering ACTA's False premise Number 3) EAI's triplex wire (Arrow #3) from the transformer pole hangs **below** the fiber-optic (Arrow #4) in the span in violation. It should be 30" **above** this fiber-optic cable. A fiber optic cable may be installed in the electric supply space (if non-conducting) or in the communication space but not in between, which is the communications worker safety zone. These fiber-optic facilities used to be part-owned by Entergy. Location: Little Rock University Ave.

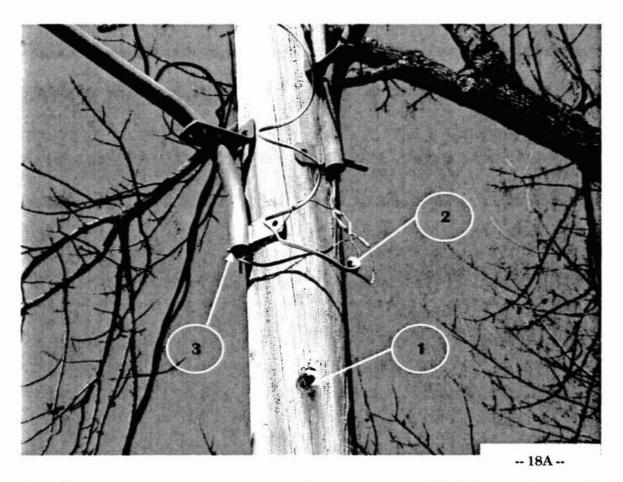
24. As I indicated, designing and implementing safety programs that include plant inspections and training of personnel working on and around electric lines accounts for a major part of my professional time. Doing this properly requires not simply that a survey or audit be designed well, that the people are well trained and the inspection is conducted thoroughly with the costs allocated fairly among the parties, but also that there is buy-in from

all involved *before* the inspection is undertaken. This buy-in is most readily facilitated with plenty of advance notice to the other parties (phone, cable, cities, transportation departments, etc.), and their active – even proactive – participation in the process.

25. Because I have worked for large and small power companies, I understand that sometimes it can be difficult to enlist the cooperation of all parties in a safety inspection. On the other hand, I believe that even in those difficult circumstances it is a mistake and unreasonable for a pole owner to approach pole tenants in a punitive fashion, as I believe Entergy has done here. It is much more productive to approach these problems in a cooperative fashion because the pole owner often creates more problems than do attaching parties, as these next two pictures illustrate.



This photo, which I took, shows two street lights. The brackets are not grounded (Arrow #1). This violates EAI construction standards which are shown in the diagrams attached to some of its agreements. Even though EAI and USS purport to be concerned about plant safety, USS did not check for this EAI violation. Twenty inches of separation is required for un-grounded street light brackets. In addition, the "romex" type wire to power the lights hangs down beside the pole in violation (Arrow #2). Location: Little Rock 10th St rear of 928 Townsend St.



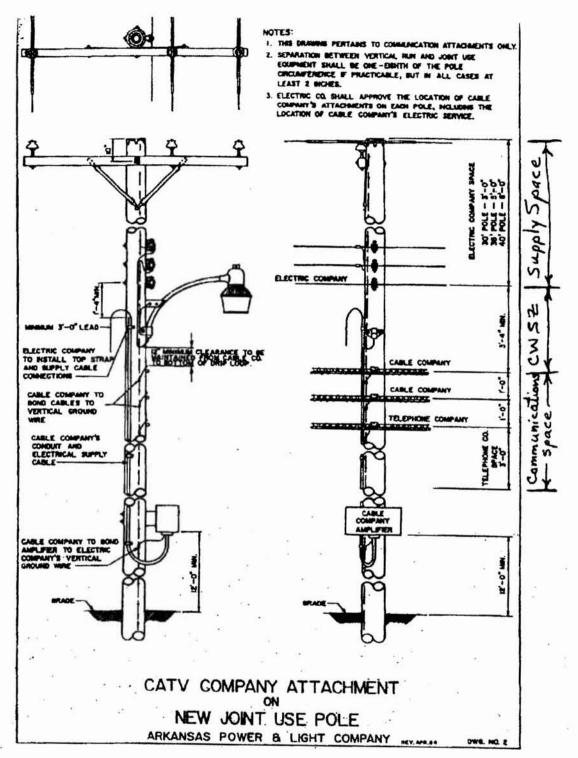
This photo, which I took of the same two lights, shows the old bolt location (Arrow #1) where Comcast cable attachment previously was located less than 12" below the light leads (Arrow #2) and less than 20" below brackets not grounded (Arrow #3). Comcast visited this pole to resolve a guying problem which USS had notified Comcast to correct. USS had notified EAI to raise light leads to 12" above cable but nothing else. While correcting the guying, Comcast lowered its cable to obtain NESC compliance from the ungrounded brackets and low light leads which EAI had not yet raised. These violations still exist and must be corrected. Location: Little Rock 10th St rear of 928 Townsend St.

False Premise No. 3: All of Power's Facilities Were Installed Before Cable's, So Cable Is Responsible For Almost All Spacing Violations On Entergy's Poles.

26. Several EAI witnesses state that because cable operators historically have been the third attacher on poles (after the electric and telephone companies put in their facilities) those cable operators must have created most of the violations on the poles. This is not correct. EAI

continues to install its facilities long after cable's attachments have been placed. To make matters worse it continues to this day to place its plant in violation, often creating gravely dangerous situations.

- 27. I have personally witnessed cable television lines installed over a 40-year period in every decade beginning in the 1960s. Aerial plant—electric and communications—is built today in much the same way that it was built in the 1960s.
- 28. The first things to be built are the poles and the electric lines that are located in the top portions of the pole. Historically, telephone companies installed their facilities in the "communications space" which begins below the "communications worker safety zone" ("CWSZ"). Cable television attachments usually were the third set of attachments to be placed on the pole, typically above telephone, and in most places except where competitive fiber-based carriers are present the last set of communications attachments before the CWSZ and (electric) supply place. The following diagram illustrates the different zones of a "typical" utility pole.

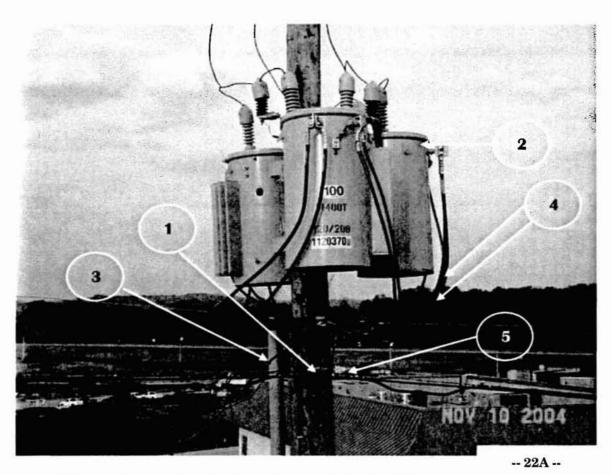


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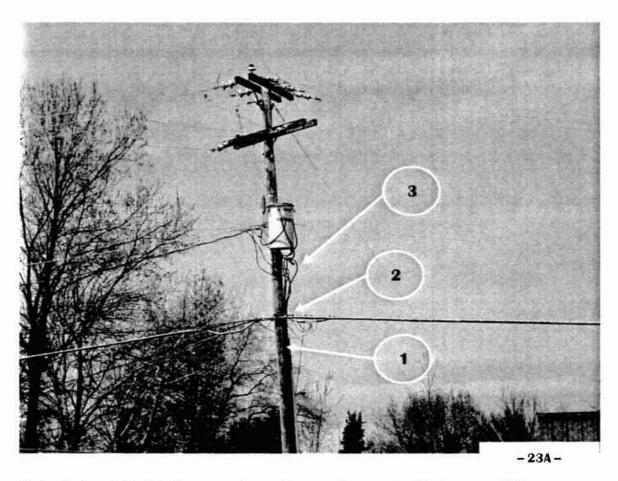
This diagram which is attached to at least some EAI pole agreements shows a standard EAI pole space allocation. This allocation includes five feet of communications space, a 40-inch communications worker safety zone ("CWSZ") and eight feet of electric supply space for a 40-foot pole. (The hand-written notes in the right margin are mine.)

The 40" space in the diagram at the right is what is referred to as the communications worker safety zone. ("CWSZ")

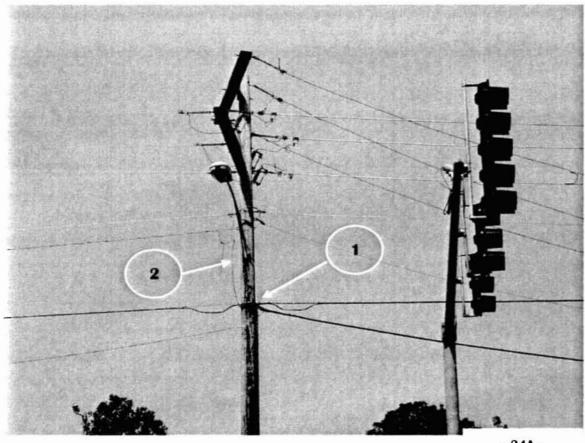
- 29. EAI's argument is that this sequence of attachments (electric, telephone and then cable) essentially proves that cable as the "last man on" must have created the violations. This argument overlooks one critical fact, the omission of which creates an absolutely false picture of plant conditions.
- 30. That fact is that power companies usually install transformers and secondary voltage wires only at the time that they are needed to supply power to a dwelling or other structure. The poles will be there, and high voltage electric lines will be there, but the transformers and secondary voltage lines to homes and businesses are only installed if electric service is needed. If electric service is not needed at a location, there is no transformer. Many of the violations that EAI assigns to Cable Operations were not created by cable at all. They were created by the electric company when it installed transformers and electric service drops (aerial or underground) in some cases decades after it set the poles and the cable operator had placed its facilities. This is not an isolated occurrence. Some good examples appear in the photographs that follow.



One of Entergy's central contentions is that electric facilities always are on the poles first and that cable facilities always come later. This is so it can argue that whenever there are clearance violations, they have been created by cable. This photo shows that this is not true. The three-phase transformer bank depicted in this photo were installed within the last several months to provide electric service to a new McDonalds restaurant. The poles and the cable television attachments (Arrow #1) were installed before the offending riser conduits and transformers. Cox was attached in compliance. The new transformer cans (Arrow #2) the grey "riser" conduit (Arrow #3) and the electric wires (Arrow #4), were installed after cable. There are no more than a few inches of separation between the hot electric wires coming out of the riser (Arrow #3) and Cox's facilities (Arrow #1). The NESC mandates that there should be 40 inches between the riser cable and the Cox attachment. I believe that this pole was set by EAI to provide adequate vertical clearance above the new driveway at the McDonalds. These photos were taken at the direction of Jeff Gould of Cox.



This photo, which I took, presents another good example. It shows an EAI secondary underground service riser pipe (Arrow #1) stopping more than 12 inches **below** the cable television facilities (Arrow #2) located on this pole. The NESC requires this electric conduit to be 40 inches above cable. You can see that there are two underground service drops running from the transformer and the loops coming out of the transformer are very sloppy (Arrow #3). Putting the proper length of conduit and placing the loops correctly could have been done easily. Underground service risers such as these are usually added long after the cable television facilities have been installed. Other examples of poorly installed electric facilities that went in long after cable appear in the next photo. Location: Jacksonville, AR Alley between N. Bailey Blvd & N. James St.



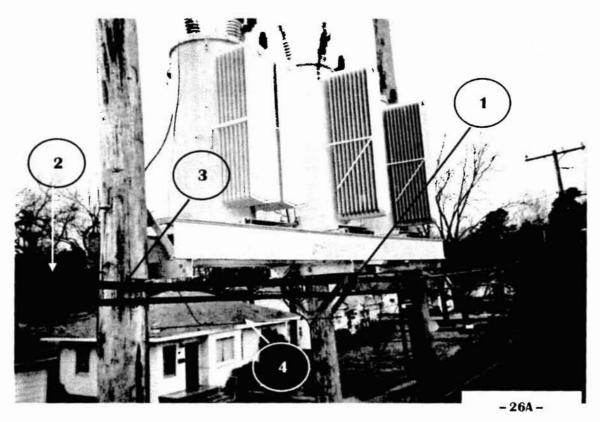
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This photo, which I took, shows an EAI service to a new traffic signal. Electric power to supply the traffic signal is wired by the governmental agency or contractor. Metal conduit with two wires for 120 volt power is extended up this pole (Arrow #1). In this case, EAI should not have made this connection because of this NESC violation, and required the conduit owner to extend the conduit to 40 inches above cable television. You can see several exposed wires hanging beside the pole next to EAI's secondary on the left of the pole (Arrow #2). This is a blatant violation of the NESC's 40 inch rule. Connections to a new service (in this case traffic) must be 40 inches above cable. EAI should remedy this by placing a "u-guard" (which is essentially one-half a plastic conduit over the traffic signal leads, or require the owner of the traffic signal to extend the weather head up to 40 inches or more above cable. Location: Jacksonville, AR W Main St at N. Bailey Blvd.

31. In growing areas, traffic signals, street lights and new homes and businesses require new electric installations. In sparsely populated areas, however, transformers are placed relatively infrequently. Many of EAI's poles were installed 20 to 40 years (or even longer) ago along roads

with little initial development. Thousands of examples of these clean poles can still be seen, especially in outlying areas. They contain almost no pole space violations because neither power, telephone, nor CATV have added any drops or other facilities to those poles.

open fields and unpopulated areas, the need for electricity increases and more transformers, services drops and other electric facilities are installed. In many of the Arkansas cases I have observed, the power company installs their facilities improperly and creates violations by installing them too close to cable and telephone. Frequently, EAI replaces a pole or adds another pole between two existing poles and does not leave space for cable television or telephone to transfer or attach in compliance. Again, the installation of these electric facilities are a major source of NESC violations, which sometimes create very serious safety issues. The next photograph provides a vivid example of this.



This photo, taken at the direction Jeff Gould of Cox Communications, shows a multipole platform-mounted voltage regulator that Entergy has installed after the installation of communications facilities. Note on the center pole the steel bracket (Arrow #1) that has completely boxed in the two sets of communications lines on the poles. The top line is the cable attachment (Arrow #2). EAI set new poles, pulled Cox's cable down and physically forced it beneath a bolt through one pole (Arrow #3). EAI built its neutral wire below the telephone cable (Arrow #4). Neither cable tv nor telephone is attached to either pole or bonded to the pole grounds. This creates a very dangerous situation In installing these facilities Entergy has violated NESC rules, cable tv, telephone and EAI standards. This photo shows that EAI has a lack of understanding of the NESC, lack of training, no inspection of new construction and a complete disregard for users of the communications space. Electric companies, like communications companies from time to time must add new facilities to their networks. But they must do so in a way that respects the rights of others to occupy the poles, including providing adequate notice of the work that they wish to perform on the poles.

False Premise No. 4: Every Entergy Pole Attachment Standard Is Reasonable And Must Be Complied With.

33. As was outlined in the Complaint and the declarations of ACTA representatives, EAI and its contractor USS are imposing a number of

engineering and construction standards on Arkansas cable operators that simply are not reasonable.

- 34. Complainants have acknowledged that certain low cables, certain missing guy wires and certain close separations between power and cable TV create reliability risks and/or hazards to utility workers or the public. These are the kinds of items that should be corrected and—contrary to Entergy's assertions—cable operators are working today to do this.
- 35. To assist in this effort, Comcast has requested from EAI a list that prioritizes the violations that should be addressed first. EAI has refused to provide this list. After first stating in a negotiation (the May 26, 2004 meeting that I discuss in detail below) that it would provide such a list, EAI later told Comcast that Comcast already had a list of all violations found and that it was Comcast's obligation to sort through the list manually to determine priorities. This is just one of innumerable examples that exemplify Entergy's "it's your problem not ours" approach.
- 36. Moreover, EAI refuses to accept NESC compliance with certain rules as a solution to existing or future compliance, even in limited circumstances, while adopting NESC basic provisions in many others. Its refusal to accept reasonable interpretations and applications of the NESC has been a very significant impediment to resolving this matter informally. I can provide a very significant example of this.

EAI Will Not Agree To Reasonable Standards

- 37. After well over a year of impasse between Entergy on the one hand, and Alliance and Comcast on the other, in approximately February 2004, Comcast requested a meeting with senior people at EAI in an effort to resolve this dispute.
- 38. As I understand it, Comcast made a personal appeal to EAI's President and CEO Hugh MacDonald. This meeting, which I attended, eventually was held on May 26, 2004 and to me seemed promising because it established a real dialogue among all the parties: EAI, the cable people and USS. In fact, one of the outcomes of that meeting was that a "committee" was established to finalize engineering and construction terms that the parties would use to make the necessary plant corrections going forward. The main outcome of that meeting is that the parties had a good start on setting a foundation on reasonable engineering standards. They also established a tentative plan of action.
- 39. After much delay by EAI, the first committee meeting was held 35 days later on June 30, 2004. The "minutes" of the May 26, 2004 meeting were presented to the committee by EAI. The following paragraph in bold print had been inserted as the first item in the "minutes."

Any exceptions to contractual requirements agreed to at this meeting, or future committee meetings will only apply to pre-existing conditions that meet all NESC requirements. All new installations and attachments must meet all conditions and requirements of the contract.

- 40. I participated in both the May 26, 2004 and the June 30, 2004 meetings. Nothing was mentioned in the May 26 meeting about the restrictions contained in this insert. Since the first sentence is confusing, we asked Entergy several questions at the June 30 meeting. EAI defined "pre-existing conditions" as only poles that had been reported by USS to have a violation. EAI further explained that all existing poles (or conditions) not identified by USS as violation poles, all poles presently included but modified in any way in the future and all new pole attachments would be subject to the different EAI standards.
- 41. We objected to the addition of these added restrictions as unreasonable and impossible to keep up with as field conditions change. It was absurd. EAI stated that the clause was non-negotiable. Getting nowhere on this point, the meeting finally moved on to attempt to resolve and clarify the few remaining issues that had not been clearly agreed to at the May 26 meeting.
- 42. Significant progress was made on the NESC rules and interpretations which EAI and USS would accept for clearing "past" violations. These included accepting 12-inch separations in spans between communications and neutral and 30-inch separation at poles. Other NESC rules regarding guying, marking guys, power supply rules and street lights were discussed and tentative agreements reached.

- 43. Another absolutely essential point on which Entergy refused to budge was that it would not agree to begin to provide advance notice to Comcast, as required by the contract, before building down on existing poles into violation. This Reply Declaration is filled with examples of where just a little bit of communication between EAI and its communications attachers would prevent inefficient use of pole space, subsequent costly corrections and, most important, unsafe plant conditions.
- 44. EAI also insisted that USS must only approve plant conditions meeting the almost agreed-upon NESC rules that differed from EAI contract on a pole-by-pole basis. This, of course, would required much more time and expense to cable operators. In sum, the spirit of cooperation that marked the first May 26 meeting was entirely absent from the June 30 meeting.

 Nonetheless, the next committee meeting was scheduled and held on July 7, 2004.
- 45. Little progress was made at that or subsequent committee meetings. EAI added language that sought to require Comcast to secure a professional engineer certification on a pole-by-pole basis that the facilities comply with NESC rules because they comply with NESC editions in effect when built. In addition, EAI refused to consider its absurd requirement limiting negotiated engineering guidelines to past-identified violations.

 Despite the fact that no final agreement was reached, Comcast notified EAI that it was proceeding to correct violations without a complete agreement but

based in part on negotiated guidelines and NESC compliance. It has continued with its corrections. I reviewed the Declaration of EAI's David Inman. While he tried to make it seem that EAI had been accommodating, my strong view is that Entergy scuttled what could have been a reasonable and workable arrangement.

EAI Has Distorted The NESC And Its Application

- As with much of what EAI has submitted here, it is not just what was said and who said it, but what is not said. The truth, as indicated, is that Entergy was not going to allow the NESC to apply to all past violations, only the poles on which USS had discovered alleged violations. As to future installations, and as to all poles on which USS had not identified violations, this statement from Mr. Inman is silent. This means that the NESC was not going to apply, but EAI's unpredictable and unreasonable standards were.
- 47. For example, these standards are unpredictable because EAI reserves the right to change them at will. Every new NESC edition has code changes but also allows existing facilities in compliance with prior editions of

the code to be grandfathered. EAI refuses to respect this critical provision. I address this corruption of grandfathering in greater detail elsewhere.

- 48. This is not to say that there should not be situations where the utility's standards exceed the NESC basic provisions. This can be a perfectly reasonable approach to take.
- 49. For example, during the design and installation phases of pole and electric facilities there are a few basic things that must be done. First, EAI must provide adequate space on the pole for its facilities (and possible expansion) and for other attachers. Second, it must actually install its wires and equipment consistent with the plant design and the space allocations. Third, communication companies, including cable operators must comply with EAI standards and attach consistent with EAI's reasonable space allocation and requirements. A point that simply cannot be over-emphasized is that the NESC is the foundation that underlies such additional utility specific standards. The heated argument that Entergy makes in its legal papers that the NESC is the absolute minimum standard to be followed fundamentally misconstrues the NESC. A critical element to understanding this most basic point is to examine closely the Declaration of EAI's expert, Mr. Dagenhart. I know Mr. Dagenhart to be very knowledgeable about the NESC, and he and his firm have a very good reputation in the utility community. Note well that Mr. Dagenhart has not provided any support for EAI's extreme view that the NESC is an absolute minimum standard. In fact,

the NESC Handbook (which many -- including myself -- find very helpful in working on these issues) which is edited by Mr. Dagenhart's business associate Alan Clapp states:

In essence, the rules of the NESC give the basic requirements of construction that are necessary for safety. If the responsible party wishes to exceed the requirements for any reason, he may do so for his own purpose <u>but need not do so for safety purposes.</u>" (my emphasis) The Handbook also states: The 1990 Edition of the NESC was specifically editorially revised to delete the use of the word 'minimum' because of the intentional or inadvertent misuse of the term by some to imply that the NESC values were some kind of minimum number that should be exceeded in practice; such is not the case.

50. While I believe that this passage speaks for itself, I want again to emphasize that Mr. Dagenhart does not render an opinion to support this central EAI contention. Again, it is not simply what is said and by whom, but what is **not** said—and by whom. I believe that this is particularly significant because, in addition to all Mr. Dagenhart's other credentials, he serves on the NESC Standards Subcommittee for Purpose, Scope, Application, Definitions and References. See NESC 2002 Ed. p. viii.

The Rules Exceptions Contained In The NESC Are Critical Components To The Rules Themselves

51. Another example of Entergy's misunderstanding of the NESC is contained in the Declaration of Lonnie Buie. Mr. Buie states: "What the complainants truly argue, in general and obscure terms, is that communications attachments may meet certain complex conditions to fall within exceptions to the basic NESC provisions." Buie Declaration Para. 28.

He argues in essence that the exceptions are not basic provisions of the NESC. He is wrong.

- 52.Rule 015.D. of the 2002 NESC (Intent) states: "Exceptions to a rule have the same force and effect required or allowed by the rule to which the exception applies." But Mr. Buie states: "NESC by its own terms is a minimum standard." But then Mr. Buie quotes Rule 010 of the NESC which contains the "basic provisions...for safety..." Prior versions of the Code used the word "minimum" instead of "basic," as it now appears. The NESC Handbook, Fifth Edition, which I quoted above, but which bears repeating here) explains why. "The 1990 edition of the NESC was specifically editorially revised to delete the use of the word "minimum" because of the intentional or inadvertent misuse of the term by some to imply that the NESC values were some kind of minimum number that should be exceeded in practice; such is not the case." So Mr. Buie is wrong about the force and effect of exceptions in the NESC and indulges in precisely the kind of "misuse" of the Code that the 1990 Edition "specifically editorially revised" out of the text.
- 53. But Mr. Buie does not stop there. Yet another misapplication of the NESC is found at Paragraph 45 of Mr. Buie's Declaration where he states that grandfathering was first adopted in the 1977 NESC and that facilities installed before 1977 would not be eligible for grandfathering. Rule 202.B.2 of the 1977 NESC states: "Existing installations, including maintenance

replacements, which comply with prior editions of this code need not be modified to comply with these rules..." This rule was effective in 1977 and a pplied to prior editions back to the 6th Edition, published in 1960. The 6th edition of the Code essentially required existing installations to be modified to comply with the standards in the 1960 edition. Additionally, the Rule 013B.1 of the current NESC states: "Where an existing installation meets, or is altered to meet, these rules, such installation is considered to be in compliance with this edition and is not required to comply with any previous edition." Together, this means that if a facility is in compliance with the rules that existed at the time the attachment was made or if that facility is in compliance with the current edition of the Code, it is not a violation.

54. The NESC Handbook confirms this:

Rule 013.B.1 now reflects that the latest edition contains the best knowledge of appropriate requirements. If an installation meets the present requirements, it is acceptable regardless of what provisions may have been in effect at the time of its construction. Thus when work on an existing structure is completed, it may meet the current edition requirements or those of a previous applicable edition.

55. Mr. Buie relies on these fundamental misconceptions in Paragraphs 70,71 and 72 of his Declaration to effect further distortions to the Code. He states that Rule 235c2b(l)(a) exception 1 is not a basic provision of the code. As shown above, the NESC says exceptions have the same force and effect as the rule to which it applies. Here is a list of a few, but not all, of the distortions and errors that Mr. Buie applies to this case. For example:

- In paragraph 74 he pointed out that the 4-inch separation between cables in spans was first in the NESC in 2002. This illustrates a misapplication of Rule 013.B.1.
- In paragraph 75 is a misinterpretation of NESC rule 015.D.
- In paragraph 78 of his declaration finds fault with my example pole 321 of circuit V210. However, if we compare the USS inspection work sheet for this pole in Harrelson exhibit 12 to the photograph in Buie exhibit G, the photograph does not match USS's work sheet or Mr. Buie's description. USS identified one violation, namely 34 inches between neutral and cable.
- In paragraph 80, Mr. Buie stated that poles 604 and 608 of circuit V620 had secondary cables going up the poles rather than primary (high voltage) cables. He goes on to say photographs of the poles are in attachment H. The photos in his attachment H shown no risers at all but rather a street light close to cable.

Many Plant Configurations That EAI Terms "Violations" Are Not

56. Another major factor in this dispute has been EAI's insistence to call things "violations" that are not violations at all. On some of these, Arkansas operators are willing to accommodate EAI and bring their facilities into compliance with some of Entergy's preferred standards. These standards are for such things as bonding to every pole, placing separate anchors for all necessary guys, placing guy markers on all guys, and other

items. While cable operators agree that accommodations on some of these points is reasonable, it is essential to understand that Entergy's MO in Arkansas is to call items like these, as well as other items like joint anchors and the 30-inch to neutral at-pole separation requirement violations when they are not. Stated another way, Entergy is classifying any cable facility that does not correspond with its own (and in most cases incorrect) assessment as violations by cable operators, while overlooking its own violations and those of other parties. Among other things, this creates the mis-impression that cable is responsible for tens of thousands violations and that nobody else—particularly EAI itself—has created violations. It is a simple formula. If cable has created the violations, it must pay to correct them. But I do not believe that this accurately reflects either Arkansas field conditions, or the truth behind EAI's inspection program—that cable operators need to be singled out because of their poor safety records. If EAI's dominant concern is plant safety other than, say, seeking others to pay for its inspection programs and plant correction, then it would do well to look at its own plant. In fact, EAI's own plant has what I would estimate tens of thousands of critical violations that are far too numerous to catalogue here. The photo appearing below is but one example.

-37-



This photograph, which was taken at the direction of Comcast's Marc Billingsley, shows a hot EAI electric service lying on the ground of some woods near a residential area in Little Rock. This hazard was initially reported to EAI by USS during its "safety audit." Comcast discovered it during a follow up engineering trip to the pole, identified by USS. Entergy still had not reattached it to the pole as of June 7, 2005. A hot wire on the ground is a serious hazard to the public. This illustrates a major clear disconnect between EAI's claimed emphasis on safety and its trouble response department.

Not Bonding To Every Ground Is Not A Violation

57. On the issue of bonding to electric grounds, Mr. Dagenhart is exactly correct in stating (in paragraph 9 of his declaration) the four-ground connections per mile NESC requirement. With approximately 24 poles per mile of line, this would require about one-sixth of the poles to be bonded. He correctly explains in paragraph 11 of his declaration that electric and communications systems are "required to meet the basic requirements of the

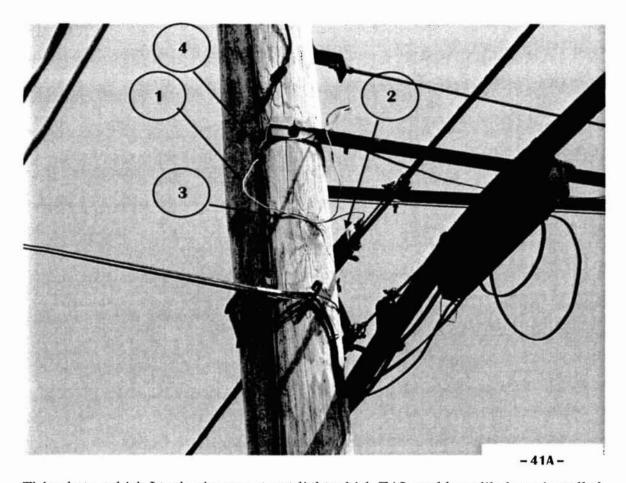
NESC." ACTA members do not now object to bonding messenger wires to EAI pole ground wires on every pole going forward. But in my opinion it is unreasonable to call missing bond connections *violations* and dangerous. It is also unreasonable to characterize this condition and many other non-violations as justification for an unjust, disruptive and expensive audit, permit freeze, and hostility toward cable. I would also note that where the electric company's neutral wire is not adequate or properly maintained that this code requirement can cause the cable strand to become the power company's neutral and present serious hazards.

Separations From Electric Facilities

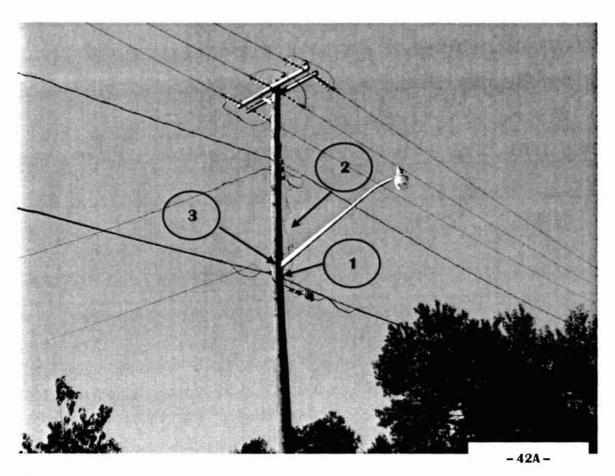
- 58. The cable operators participating in this case have not contended that EAI should be allowed to design only to the basic provisions of the NESC. They have simply asked EAI that a few NESC provisions specific to communications including the specific rules governing separations between power and communications facilities at the pole, as well as in the spans between the poles, be accepted on poles where EAI does not have adequate space for EAI's greater requirements. While EAI uses some, they do not use all of these NESC basic provisions.
- 59. For example, EAI accepts 12-inch separation from 120-volt electric leads going into street lights. EAI, will not accept 30 inches separation from the electric neutral wire at 0 volts. It requires 40 inches, the same as for wires up to 8,700 volts.

60. In addition, EAI did agree to use some of these NESC rules for "past" violations and on a case-by-case basis, but only with a PE certification. Ironically, some NESC basic provisions for employee safety have been overlooked by EAI and USS, as well as some of EAI's design specifications which exceed NESC. Examples of these include the NESC requirement of 20 inch separation between a non-grounded light bracket and communications, and the EAI design specifications that all light brackets be grounded.

Another hazardous EAI practice which violates EAI standards and the NESC is connecting neutral conductors from lights and other equipment directly to pole ground wires and even using neutral conductors to first "ground" light brackets and then connect to pole grounds. The two photographs below are two very good examples of this problem.



This photo, which I took, shows a street light which EAI could readily have installed in compliance with the NESC but the white lead from the light (Arrow #1) runs down the pole until it almost touches the cable to attachment (Arrow #2) and does touch the cable bond wire (Arrow #3). Then this white street light lead goes back up and connects to the EAI pole ground wire (Arrow #4). EAI has created three violations here. First, street light leads must be 12" above CATV. Second, the white neutral lead must connect to a neutral conductor (wire) not a pole ground wire. Third, the street light bracket must be grounded, or, the bracket must be 20 inches from cable. EAI's contractor, USS, which inspected this pole has seldom noted a street light grounding violation and never noted an incorrectly connected neutral. These numerous violations of the basic provisions of the NESC create real hazards to communications workers and electric workers alike and are the responsibility of the electric company to correct. Jacksonville, AR. N. First St.



This photo, which I took, shows a street light placed much too close to cable (Arrow #1). One hot wire lead (120 v.) hangs down alongside the pole (Arrow #2). The neutral wire for the light is connected to the pole ground at the same level as the cable television attachment. The bracket is not grounded (Arrow #3). There are four significant EAI violations at this location: (1) the street light leads are less than 12 inches to cable; (2) the bracket is grounded and is less than 20 inches to cable; (3) the neutral is connected to pole ground; (4) the long, hot wire is not secured to the pole. Location: Little Rock Mablevale Pike.

Not Having 12 Inches Of Separation Between Communications Facilities Is Not A Violation

61. The twelve-inch separation standard between telephone cables and telephone and cable facilities has been a Bell System standard and an industry-wide rule of thumb for decades. Generally, communications parties complied with it when it was sensible to do so, but it very frequently has not been followed in the field. Many electric power companies had this standard

it in their contracts but the agreements typically were silent on remedies for non-compliance. Finally, in 2002 this twelve-inch standard was incorporated into the NESC at Section 235H as a new NESC requirement. Of course, (and as I discuss elsewhere) the new 2002 requirement grandfathers all prior non-compliant installations.

- 62. It is very informative to read the actual new requirement:
- 235H.1. The spacing between messengers should (my emphasis) be not less than 30mm (12 in) except by agreement between the parties involved.
- 235H.2 The clearances between the conductors, cables, and equipment of one communication utility to those of another, anywhere in the span, shall be not less than 100mm (4 in), except by agreement between the parties involved.
- treated less than 12 inches of separation between communications cables as violations and have cited them for thousands of these items. The 12-inch standard certainly was not an NESC violation prior to 2002. Moreover, the words that the 2002 Code adopts are normative ("should") and not mandatory ("shall" or "will"). The standard set forth in Section 235H.2, however, is mandatory ("shall") but was only adopted in 2002. In fact, no specific separation in the span (*i.e.*, in the lines between the poles, as opposed to at the poles) at all was required by the NESC until the 2002 edition. This means that if the facility was installed before 2002 and there was less than four inches of span clearance, then that facility is compliant. Equally important, paragraph 235H.2 allows communications companies to agree

otherwise. This entire issue of separations between communication cables is more about limiting damage to cables, than addressing concerns for worker or public safety.

Entergy Is Not Complying With Its Own Standards

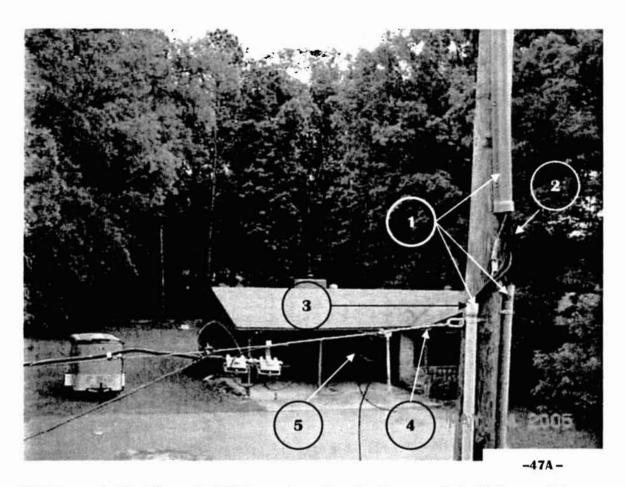
- 64. Despite the significant misgivings I have about a number of assertions that Entergy has made in connection with this dispute, I would not be surprised if Entergy's basic standards for overhead line construction were good and reasonable. I am quite familiar with standards like these, and I have seen excerpts of Entergy's that are attached to some agreements. But I have not seen a complete set.
- 65. Pole owners including EAI usually (and should) have standards which first assure compliance with all applicable NESC rules.
- 66. The NESC is not a specifications manual or a design standard, nor should it be. Company specific manuals specify many details including materials to be used such as wood, steel or concrete poles, fiberglass, wood or steel crossarms, porcelain or polymer insulators and thousands of other details which are options in the NESC so long as the materials meet basic code requirements. The NESC details what is to be accomplished with respect to safety.
- 67. Manuals do not include every combination of facility which eventually gets installed on a pole. Manuals specify the spacing to be used on relatively clean poles by the use of drawings with dimensions. No manual

a ttempts to require the shortest pole, for example, that would meet the NESC requirements of what is placed on the pole initially. Good practice is to place tall enough poles to allow for addition of electric facilities and communications facilities over a period of years.

- 68. As long as the pole owner complies initially with the NESC and its own standards, the communications attachers can and should comply with owner standards and the NESC. As the pole fills up over time with additional facilities, the NESC and common sense come into play. Neither owner nor attacher should keep adding facilities to a pole until it violates the NESC, but it is inefficient, not necessary for safety and financially irresponsible to replace a pole if the existing pole complies with the NESC.
- 69. Over the last several months I am aware that certain Arkansas operators have requested EAI to provide a complete copy of its design and construction standards. While Entergy agreed to provide them, they did not ultimately do so. This is a problem for a number of reasons.
- 70. First, it is impossible to engineer, build and maintain facilities in compliance with Entergy's standards if the attaching parties do not know what those standards are. This has been a particularly acute problem because the ultimate arbiter on these standards has not proven to be EAI, but its contractor USS. As others discuss, it is not unusual for an EAI representative like Brad Welch to agree to one set of engineering solutions and for a cable operator to make plans to comply with that, only to be

subsequently overruled by USS. Indeed, it would not surprise me at all if the reason that EAI has not provided operators with the complete set of its own standards is because it would be readily apparent that they would be in violation of those standards on essentially a system-wide basis.

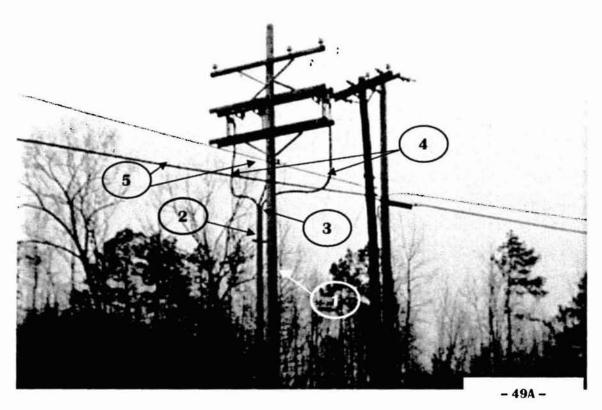
71. As indicated previously, I am very familiar with these kinds of engineering guidelines. But after nearly two years and innumerable visits to the field in Arkansas, there is no question that the condition of Entergy's own aerial plant shows the need for serious system-wide training and correction. The EAI joint-use specifications that I have seen are generally well-defined, and except where I have noted otherwise, reasonable for new Entergy pole installations. If Entergy were to follow those specifications when it installs its facilities, then we would have many fewer problems in Arkansas. But this is a big "if." The following medley of photos and descriptions makes this point very strongly.



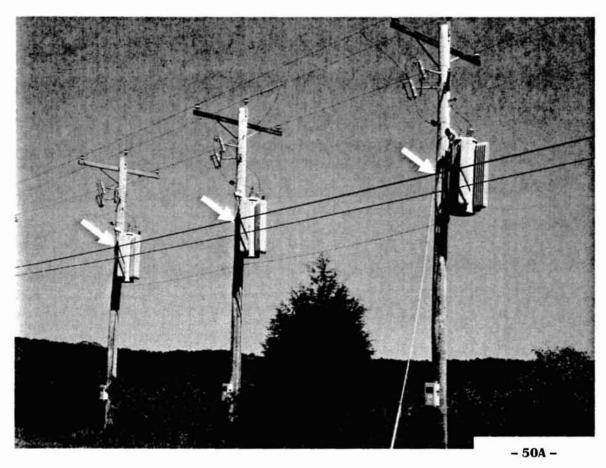
This is a pole that Cox asked Entergy to replace for its upgrade in Malvern. It is a brand new pole, so EAI was starting with a clean slate. The first problem is that EAI has installed the riser conduits poorly (Arrow #1). The black cables visible in the photos are hot electric cables leading from a transformer at the top of the pole to an underground electric service installation (Arrow #2). The top of the conduit (Arrow #3) is about two or three inches from Cox's cable TV facility (Arrow #4). The dangling wire visible about a foot to the left of the pole (Arrow #5) is one of Cox's customer service drops that Entergy did not re-connect after it replaced the pole and took the liberty to transfer Cox facilities. Another major problem is that this is a dead-end pole, that EAI did not guy. All dead-end poles must have guys to balance load tension.



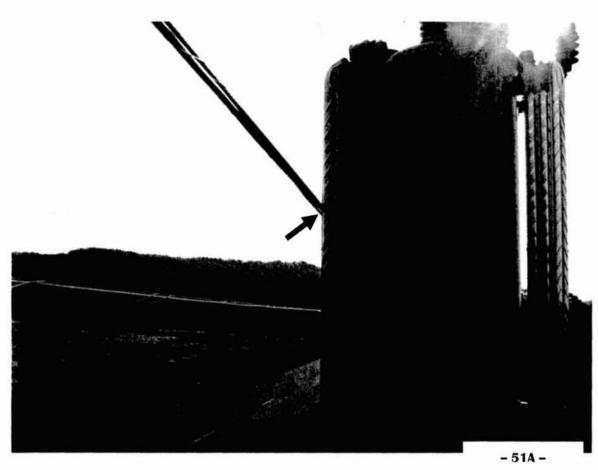
As is clear from this photo of the same pole depicted in the previous photo there is no guy and the pole is already leaning. This situation will get worse over time. Lines will sag, possibly creating hazards with traffic beneath the span. The pole could eventually fall down.



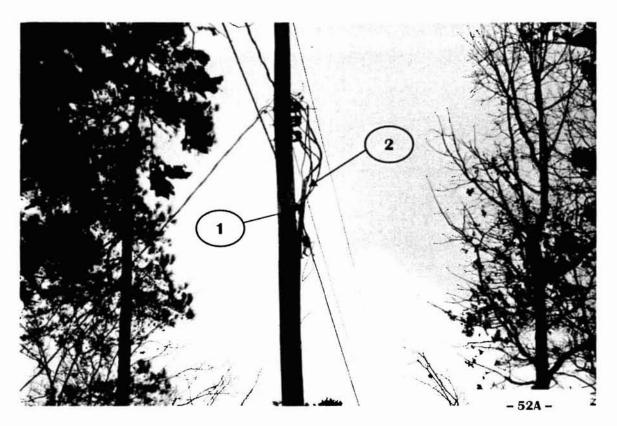
This new pole (Arrow #1) and high voltage primary cable riser (Arrow #2) was installed by EAI. The riser pipe (Arrow #3) stopped below cable (Arrow #4), not 40 inches above as EAI insists is their mandatory standard. The electric cable then flared out from the riser, completely surrounding the cable TV facility (Arrow #4). Comcast ultimately was able to extricate its facilities, but only by cutting them down – a very expensive and wasteful operation that could have been avoided if EAI had sought to notify attachers of this new installation and coordinate the project. This photo was taken at the direction of Marc Billingsley of Comcast.



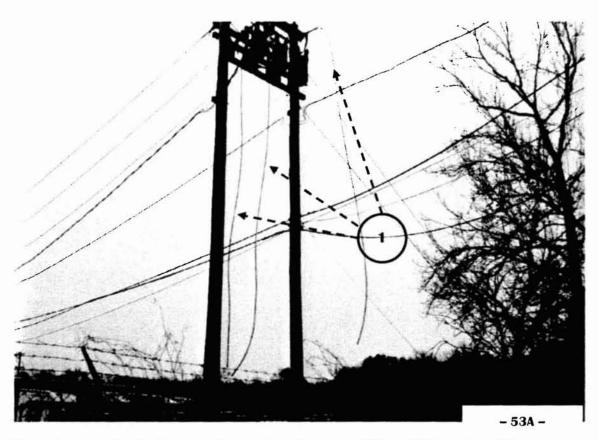
These photographs were taken at the direction of Jeff Gould of Cox in that company's Russelville system. Here, the power company very recently has (1) installed new poles; (2) put up three step voltage regulators, and (3) put the regulator tanks into direct contact with the pre-existing communications lines. The communications cable near the top of the long regulator tanks is much less than 40 inches to the exposed high-voltage wires and connections on top of the regulator tanks and within easy reach of workers and sudden death. In addition, the neutral that according to EAI must in all cases be 40 inches *above* communications, EAI actually installed several feet *below* communications. But the communications lines are not connected to these poles and are merely rubbing against these regulator tanks. This is obvious from the next photo.



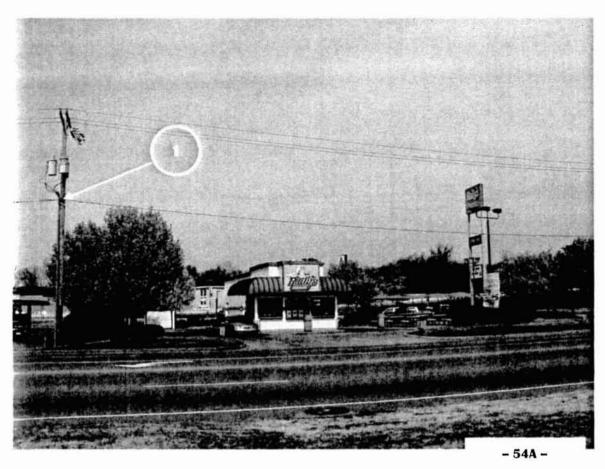
This photo was taken at the direction of Cox's Jeff Gould.



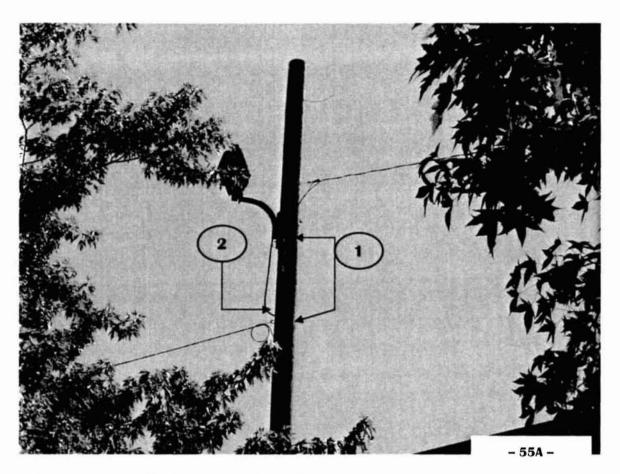
This photo depicts a typical EAI configuration in Arkansas. Not only has the power company installed the electric riser and conduit literally on top of the cable television facilities (Arrow #1), but the riser is too short (Arrow #2), creating multiple violations of the electric-to-communications clearance standards of the NESC. Note also the "fly-away" appearance of the riser conduit. These electric cables above the riser pipes, which pin cable television poles and preventing CATV workers from accessing facilities without touching power, should be corrected immediately by EAI. This photo was taken at the direction of Marc Billingsley of Comcast.



This photograph which was taken at the direction of Marc Billingsley of Comcast, shows dead primary lines hanging down (Arrow #1) from the top of high-voltage power distribution poles near an abandoned bicycle factory at 6301 Patterson Road in Little Rock. The power lines, even though apparently de-activated, create a dangerous situation because they touch the cable television support strand and they hang down low to the ground. The work rules of the NESC apply to electric workers and communications workers. They do not permit workers to treat such lines as dead unless they are disconnected from the source, tested for absence of voltage and grounded. Further, NESC rule 214.B.3. states that lines permanently abandoned shall be removed or maintained in a safe condition. These abandoned lines create serious hazards for workers and the public.



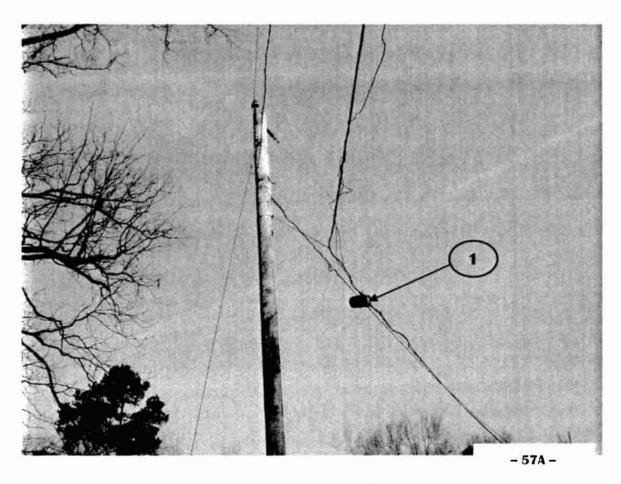
This photo, which I took, shows a pole at the left where there is a new underground electric service riser, with the riser pipe stopped about 4 inches above the cable television facilities (Arrow #3). EAI could have easily installed this service riser to a place above the neutral wire, which would meet the NESC 40" requirement. I was present during a make ready field meeting held on March 24, 2005 to accommodate a project for another communications company in the area needing access to EAI poles. At that meeting EAI and USS told Comcast that they would not extend this riser and would not accept responsibility for fixing the violation that it created. Location: Jacksonville, AR, N. First ST.



This new street light illuminates the parking lot at the Comcast building in Little Rock. There is ample separation between the light bracket and the communications drop (Arrow #1) but EAI has built this new light with excessively long power leads (Arrow #2), hanging down closer than 12 inches above communications. Location: Little Rock, Enmar Dr.



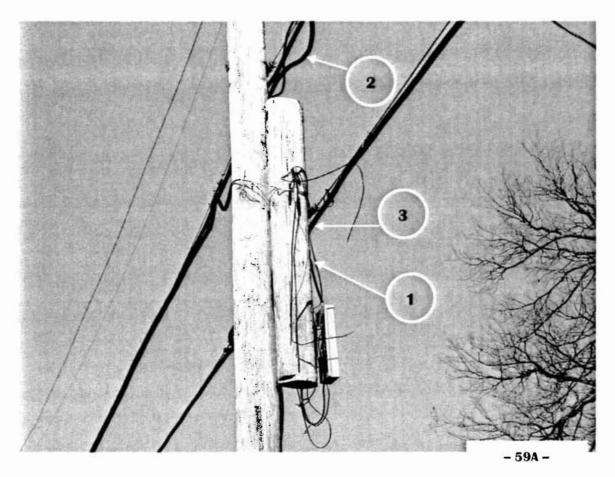
The power lines in this photo, which I took, are along back lot lines between houses. This power drop (triplex cable, 240/120 volts (Arrow #1)) has pulled loose from the house and is being held up by a Comcast drop wire to the same house. Good communications, cooperation and fairness help keep these types of problems from getting out of control. Location: Jacksonville, AR.



This photo, which I took, shows another EAI pole that apparently was broken by a vehicle. EAI tied Comcast's cable, plus a big chunk of the pole that it had sawed off from the old pole with a piece of scrap wire (Arrow #1). Comcast discovered this during a make-ready ride-out to assist another party in gaining access to Entergy poles in March 2005. This is a good example, and there are countless other ones, where EAI simply did not inform cable that it had performed work on the cable to facilities. This continues to be a big problem. Location: Jacksonville Hwy 67/267.



This photo, which I took, shows a very low electric service that is only 12 feet above the street (Arrow #1). NESC Rule 232 Table 232-1 requires it to be 16 feet. Unless it is raised, eventually a tall vehicle will pull this hot electric wire down. Location: Little Rock E. $11^{\rm th}$ St and J.L. Hawkins St.



This pole, which is the same one as the prior photo shows a 5-foot length of the old broken pole, wired to the new pole by EAI (Arrow #1). You can see that the cable company has transferred its facility (Arrow #2) from the old pole to the new pole, but that the telephone company (Arrow #3) has not. Comcast notified EAI of this hazard, which EAI most likely created in conducting an emergency repair to the pole after a vehicle collision. Location: Little Rock E. 11th St and J.L. Hawkins St.



This photo, which I took, shows where EAI placed a new bright yellow guy marker (Arrow #1) on its steel down guy, but ignored the much more serious issue of the slack down guy that was providing no stability or support to the pole. In fact the guy was so slack the guy marker could not stay on properly (Arrow #2). The next pole in the span also contained a slack guy, which caused the two poles to bend in toward one another creating unacceptable slack in the span. Location: Little Rock, Enmar Dr.

72. This small sampling of violations that Entergy has created point up major deficiencies in EAI's standards and processes. First, they do not adequately address situations where EAI does not comply with its own standards on its poles which otherwise would have adequate space. Second, EAI does not recognize the legitimate compliance margin built into the NESC itself for any new or existing pole which complies with the NESC.

- 73. For example, EAI and other power companies have drawings and dimensions (measurements) for such things as setting depth for poles, required distances for wires and neutrals from the top of poles; spacing between wires; fused switches and transformers, etc. For its part, EAI designates 8 feet of the top of 40 foot poles as electric company space. The next 3 feet 4 inches (40 inches) to the top communications attachment, is the communications safety zone. A 40-foot pole needs a ground-set depth of six feet. Thus, if EAI sets a 40 foot pole 7 feet deep and actually places a secondary riser pipe 9 feet below the top of the pole, two feet of designed usable space has been wasted. EAI should accept responsibility for such deviations from its own standards, pay for remedial action where required and retrain its designers and construction crews to avoid such waste. EAI should certainly stop trying to make cable operators pay for it.
- 74. The net result of EAI's non-compliance with its own standards, the NESC or even good common-sense field practice is that EAI has wasted incalculable amounts of pole space in Arkansas, created innumerable unsafe field conditions and then blamed its wide-spread compliance failures on cable operators.
- 75. The bottom line is that if EAI would characterize its own joint use standards as being preferred, and acknowledge that NESC compliance is an appropriate "alternate" standard where its own internal guidelines cannot

reasonably be met, then the standards for joint use could be quickly resolved.

The NESC and the NESC Handbook both provide support for this approach.

76. Finally, there are violations on the poles that cable operators are responsible for. Cable operators have gone about correcting those violations. However, as indicated earlier, many of these violations are not safety hazards and do not pose any threat to the public, to line works, the electric grid or electric system reliability. These kinds of violations should be recorded and corrected in the course of system maintenance and routine construction and system improvement. Serious violations that do pose a risk to safety and services integrity should be corrected promptly.

False Premise No. 5: It Is Not Possible To Categorize Pole Attachment Clearance And Safety Issues And That Each Pole Must Be Resolved On A Case-By-Case Basis.

- 77. One of the biggest stumbling blocks throughout this process has been Entergy's refusal to accept long-standing and reasonable application of a variety of NESC standards, including the NESC's grandfathering provisions.
- 78. EAI has stated that it will not accept a cable television facility as being compliant with NESC paragraph 13B (grandfathering) unless the cable operator secures a P.E. certification for each individual facility on each pole affected. What EAI in effect has done is state that each pole is unique and that design and corrections cannot be standardized. This, of course, is absurd. Complainants have identified this as EAI's False Premise No. 5.

- 79. To adopt Entergy's view and require a P.E. to examine each pole would be much like requiring a medical doctor to apply all band-aids.

 Reasonable procedures for a P.E. to be responsible for, in charge of, and, to sign off on a compliance certification could be negotiated. In fact, Comcast suggested to EAI at the May 26, 2004 meeting that Comcast could provide P.E. certification to EAI of compliance with the then almost agreed-upon guidelines. This type of P.E. certification would have covered violations corrected or grandfathered on a circuit basis and was offered by the cable side in lieu of a post inspection by USS. EAI stated that it would evaluate the proposal, but that it wanted USS to do post inspections initially and possibly accept category certification as "trust developed."
- 80. There is no question that an NESC expert could, and perhaps should, be involved in developing detailed field procedures and other materials reasonably required to determine that a cable facility (drop wire, J-hook, tap, power supply, cable line, etc.) is NESC compliant under NESC Paragraph 13B (Grandfathering). A well-designed and conducted NESC audit procedure would address <u>categories</u> of facilities and detail any specific data that must be gathered on each individual facility. The development of procedures would absolutely be done by <u>categories</u> such as drop wires to houses, mid-span clearances, etc.
- 81. The involvement of NESC experts (who may be P.E.) working for communications companies and pole owners could be a very useful part of

improving NESC and EAI standards compliance. The resulting inspection and audit procedures should be applied to all attachers.

- 82. Again, the corrections required by the P.E. should be the basis for retraining engineers, construction crews and joint use administrators.

 But the starting point is establishing reasonable guidelines, based on EAI standards and the NESC which at its foundation is a practical and flexible "living, breathing" source of guidance. Its grandfathering provisions are critical to the Code and critical to allowing communications companies and pole owners to work through complex issues.
- 83. Specifically with respect to grandfathering, EAI has insisted that it will only accept grandfathering with P.E. certification on **past** violations. If reasonable engineering guidelines cannot be applied to past, present, and future attachments, the record keeping for which poles, among thousands, the negotiated standards apply, and which poles EAI standards apply, as well as when a pole moves from the prior category to the latter, will be impossible. Trust and cooperation will never be restored and ultimately better safer electric plant will not be achieved.

False Premise No. 6: The Permitting Freeze Is Not A Permitting Freeze.

84. I read with interest EAI's assertion that it has not imposed a permitting freeze on the cable operators in this case. EAI's approach has been quite simple. For Alliance and Comcast, the two operators that have been subject to the full USS safety audit, EAI refused to allow them to access

additional EAI poles within a circuit until (1) payment was made on the USS invoices (2) all safety violations on the circuit are corrected.

- 85. I understand the operators are reluctant to pay the entirety of the USS fees because they believe that the work was not done well and that the allocation was not fair. This is detailed elsewhere.
- 86. With respect to correcting the violations, the greatest barriers to that ever occurring are: (1) the lack of reasoned standards; (2) coordination among the parties; (3) the condition of Entergy's own plant; and (4) EAI's continuous creation of new violations. As long as this is the environment, EAI's 100% compliance standard will never be met.
- 87. Contrast this approach with the one that EAI has taken with respect to another (non-complainant) cable company. As detailed in Marc Billingsley's reply declaration, one cable operator that is not participating in this complaint had an urgent need to install fiber optics on more than 160 Entergy poles in Jacksonville, Arkansas. While there are a number of NESC clearance issues on these poles before this operator attached, and there are even more that were created by the installation of the additional communications facilities, these can—and I understand will—be remedied.
- 88. In contrast to Entergy's stance toward the Complainants here that no new cable plant could be installed until all violations were cleared on the poles, and all make-ready work completed, EAI allowed this operator to build through the violations and correct them later. It is permissible to do

this because the work rules found at Section 4 of the NESC allow work to proceed on poles where there are NESC violations. These work rules for communications workers must be followed. This is the approach that—notwithstanding other aspects of the dispute—EAI should follow with new builds that Complainants will require. While I understand that EAI in some sense has "discriminated" against Complainants (perhaps because this company hired USS), my view is that this episode shows that Entergy knows how to accommodate joint-use requests expeditiously. This includes the critical elements of communicating and coordinating with the affected parties and being reasonable and flexible on certain clearance requirements.

Recommendations

- 89. For all the Complainants in this matter, however, the current situation is untenable. I have several suggestions that I believe will solve a number of these problems and get things back on track.
- 90. First, engineering guidelines should be developed that recognize EAI's responsibility and right to develop its own specifications manual. These specifications should include rules for joint use which state EAI's preferences, but that acknowledge that NESC compliance is acceptable where pole and location constraints prevent achieving EAI's preference. No distribution specifications manual, and I have seen many, contains all combinations of electric facilities which are constructed on poles in the field. For example lights are added to many existing poles with a wide variety of

combinations of electric and communications facilities already in place.

Manuals typically show one or two drawings with dimensions of lights

mounted on exemplar poles. Utilities rely on adequate training, experience
and inspection to combine facilities from multiple drawings on a given pole.

This training must be based on understanding and application of the NESC.

- 91. Second, clear joint use procedures should be developed that allow each company to accomplish their work safely, timely and economically. The procedures must hold all parties accountable for compliance including EAI.
- 92. Third, the pole owners and *all* attaching parties (including EAI, telephone, municipal and state attachers, etc.) should be thoroughly trained in the applicable NESC and Energy standards.
- 93. Fourth the negotiation and execution of a new pole attachment agreement that could include EAI preferred standards and reflects NESC principles, existing legal precedent and field-developed best practices, particularly in the area of inspections and plant clean-up.
- 94. If the concepts such as those that I have outline in paragraphs 90-93 are implemented, then I believe that the relationships and operations that are in a shambles today can be restored. Despite all these problems EAI has shown the capacity to act reasonably and expedite access to some parties, if not Complainants. This at least shows that there is hope.

BEFORE THE FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, D.C. 20564

In the Matter of	
ARKANSAS CABLE)
TELECOMMUNICATIONS	
ASSOCIATION; COMCAST OF	
ARKANSAS, INC.; BUFORD	File No.
COMMUNICATIONS I, L.P. d/b/a)
ALLIANCE COMMUNICATIONS)
NETWORK; WEHCO VIDEO, INC.; and)
TCA CABLE PARTNERS d/b/a COX)
COMMUNICATIONS,)
Complainants)
v.)
ENTERGY ARKANSAS, INC.) }
Respondent.) }
	I .

Reply Declaration of Michael T. Harrelson, P.E.

I, Michael T. Harrelson assert under the penalties of perjury of the law of the United States that the foregoing Reply Declaration is true and correct.

Michael J. Harrelson, P.E.